

What is claimed is:

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1. A communication control device comprising:
a plurality of layer control devices, each
implementing part of protocol layer functions and
5 together supporting a communication protocol; and
a transmission line for interconnecting
said plurality of layer control devices to enable data
communication between said layer control devices.
 2. A communication control device, as claimed in
10 claim 1, wherein a plurality of physical layer control
devices are provided, each implementing the function of a
different physical layer, and one of said physical layer
control devices is dynamically selected when performing
communication.
 - 15 3. A communication control device, as claimed in
claim 1, wherein a physical layer control device for
implementing the function of a physical layer is provided
which is duplicated by another physical layer control
device, and in the event of a failure of one physical
20 layer control device, the other physical layer control
device is switched in for operation.
 4. A communication control device as claimed in
claim 1, wherein a program necessary for the operation of
each of said layer control devices is downloaded to said
25 each layer control device.
 5. A communication control device as claimed in
claim 1, wherein said transmission line is a serial bus.
 6. A communication control device as claimed in
claim 5, wherein said serial bus is compliant with the
30 USB standard.
 7. A communication control device as claimed in
claim 5, wherein said serial bus is compliant with the
IEEE 1394 standard.

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